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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,596	10/27/2000	Chikako Nakamura	788_077	6381

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EXAMINER

MCKANE, ELIZABETH L

ART UNIT PAPER NUMBER

1744

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/698,596

Applicant(s)

NAKAMURA ET AL.

Examiner

Leigh McKane

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Seiko (JP 11-302413).

Seiko teaches a solution for cleaning contacts containing TiO₂ particles dispersed in water.

3. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Asahi (JP 5-295391).

Asahi teaches a cleaning solution for contact lens wherein the aqueous solution contains titania particles.

4. Claims 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis et al (U.S. Patent No. 4,394,179).

Ellis et al discloses cleaning solutions for contact lenses containing a titanium dioxide abrasive. See Example XXI. The solutions also contain sodium chloride. See Example I.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seiko (JP 11-302413).

Although Seiko does not teach a concentration of titanium dioxide to employ, the titanium dioxide is used as a photocatalyst for bacterial effect. Thus, it would have been obvious that upon optimizing the concentration, the amount would have been in the range of 1-100 ppm.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Seiko, Asahi or Ellis et al, all in view of Koller (U.S. Patent No. 4,631,072).

All of Seiko, Asahi and Ellis et al teach compositions for cleaning contact lenses.

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Moreover, Ellis et al discloses using the cleaning compositions along with an anti-microbial compound. See col.4, lines 30-38. None teach the use of hydrogen peroxide.

Koller teaches an abrasive cleaning composition for contact lenses that may also contain hydrogen peroxide. See col.3, lines 18-30. As it is well-known in the art to combine the steps of cleaning and sterilizing, it would have been obvious to add hydrogen peroxide to the solutions of Seiko, Asahi and Ellis et al.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seiko, Asahi, Ellis et al, and Koller as applied to claim 17 above, and further in view of Park et al (U.S. Patent No. 5,840,250).

The combination *supra* is silent with respect to inclusion of a metal ion in the composition. Park et al, however, evidences that it was known in the art to add a metal ion, such as copper, to a contact lens treating solution where hydrogen peroxide is present in order to provide an indication of peroxide presence/absence in the solution. As Park et al teaches that such an indication is necessary in order to prevent damage to a users eyes, it would have been obvious in the combination of Seiko, Asahi or Ellis et al, all with Koller.

Allowable Subject Matter

11. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:
None of the prior art of record teach or suggest the particle size claimed.

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13. Claims 1-12 are allowed.

14. The following is a statement of reasons for allowance: The closest prior art with respect to the method of disinfecting a contact lens is Seiko (JP 11-302413), who teaches contacting a contact lens with an aqueous solution of titania particles while exposing the lens and particles to UV radiation. The photocatalytic effect of particles simultaneously disinfects and cleans the lenses. However, Seiko does not teach or suggest immersing the lenses in the solution. In fact, doing so would effectively destroy the invention of Seiko, who uses impingement of the liquid and particles to abrade/clean the surface of the lens. In essence, impingement of the surface is necessary in the invention of Seiko and impingement could not occur were the lens immersed.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 703-305-3387. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

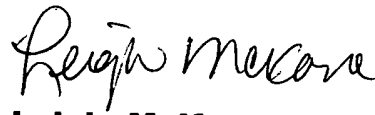
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Leigh McKane
Primary Examiner
Art Unit 1744

elm
May 5, 2003